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**A NEW INTRANASAL CHIGGER OF THE SUBGENUS *CRYPTICULA*,
GENUS *MICROTROMBICULA* (ACARINA: TROMBICULIDAE) FROM TEXAS**

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ABSTRACT: A new species of *Microtrombicula* (*Crypticula*) is based on intranasal larvae from *Peromyscus pectoralis* trapped near Del Rio, Val Verde Co., Texas.

Webb and Loomis (1970) reported nine intranasal species which belong to the subgenus *Crypticula* Webb and Loomis of the genus *Microtrombicula*: five from North America and four from Korea. *Microtrombicula diabola* Webb and Loomis (1970) was taken from two *Peromyscus difficilis nasutus* (rock mouse) trapped near Del Rio, Texas and attempts to obtain additional larvae from near the type locality (now under water of the Amistad Reservoir) yielded a second new species which is described below. Studies upon which this paper is based were supported by the U.S. Public Health Service Research Grant AI-03407 from the National Institute of Allergy and Infectious Diseases.

***Microtrombicula welbourni*, new species**

Figure 1

Types.—Larvae: Holotype and 11 paratypes from the nasal passages of 2 *Peromyscus pectoralis laceianus* (white-ankled mouse) taken 10 mi N, 8 mi W Del Rio, 1000 ft, Val Verde Co., Texas, 28 July 1970, by W. C. Welbourn, Jr., R. B. Loomis, and R. C. Stephens, original numbers WCW700728-15 (holotype and 10 paratypes) and WCW700728-

14 (1). The holotype and one paratype will be deposited in the collection of the Rocky Mountain Laboratory, Hamilton, Montana, and available paratypes will be sent to appropriate institutions.

Diagnosis.—Larva differing from all other members of the subgenus *Crypticula* in having 3-5 setae on coxa III (*M. ornata* bisetose, other species unisetose), and from *M. diabola* in possessing eyes, nude galeala, and dorsal knob on cheliceral blade.

Description of holotype (all measurements in microns, with means and ranges of all 12 types in parentheses, unless otherwise indicated).—Body engorged, 580 by 410; color in life, pale yellow; eyes 2/2, anterior larger, ocular plate indistinct.

Dorsal setae 2-6-6-6-6+14, total 40; measurements of humeral seta 43, anterior dorsal seta 29, posterior dorsal seta 27.

Ventral setae 2-2 (sternals) + 48, total 52; measurements of anterior sternal seta 29, anterior ventral seta 28, posterior ventral seta 29.

Scutum: Subpentagonal: with large puncta in reticulate pattern; sensilla flagelliform with 3-5

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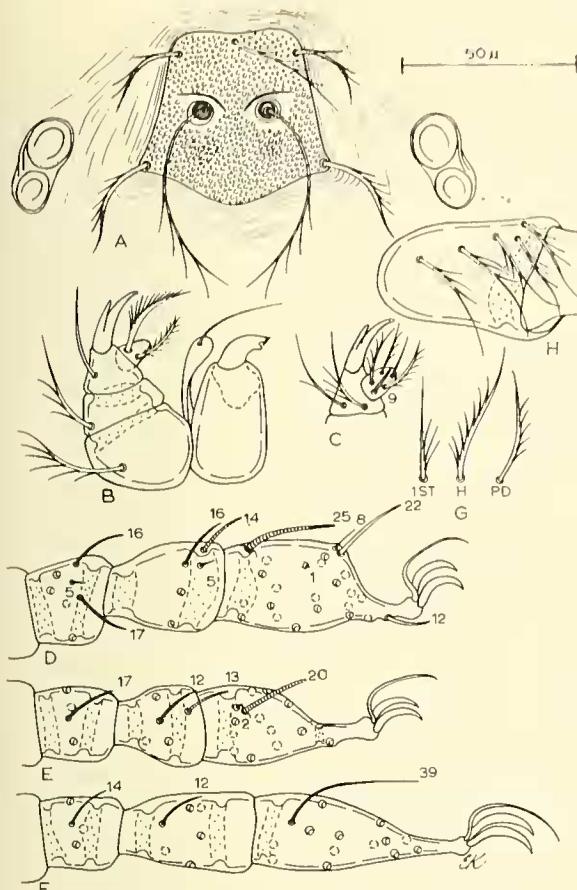


Figure 1. *Microtrombicula (Crypticula) welbourni*, new species. A. Scutum and eyes. B. Dorsal aspect of gnathosoma. C. Ventral aspect of palpotibia and tarsus. D. Leg I, genu, tibia, and tarsus, showing nude setae (measurements in microns) and bases of branched setae. E. Leg II, as above. F. Leg III, as above. G. Body setae: 1ST, first sternal, H. humeral, PD. posterior dorsal. H. Coxa III.

distal branches and several short proximal barbs.

Scutal measurements: AW 36 (34, 32-36), PW 50 (48.5, 47-50), SB 21 (20, 19-22), ASB 21 (22, 21-23), PSB 25 (26, 25-28), AP 28 (31, 28-33), AM 28 (29, 25-33), AL 24 (21, 19-24; 11), PL 29 (30, 28-32), S 60 (57, 53-60; 8).

Gnathosoma: Cheliceral blade with small tri-

euspis cap and dorsal knob; cheliceral base and capitular sternum lightly punctate. Galeata nude. Palpal setae B/B/NbB; palpotarsus with 1 nude and 5 branched setae, and tarsala 9, palpotibial claw bifurcate, axial prong slightly curved. Leg I coxa unisetose, 2 genualae and microgenuala, 2 tibialae and microtibiala, tarsala 24 (24, 22-26), distal microtarsala, subterminata, parasubterminata, and pretarsala; leg II, coxa unisetose, 2 tibialae, tarsala 19 (19, 17-20) and proximal microtarsala; leg III, coxa with 3 and 4 (3 to 5) branched setae, genuala, tibiala, and 1 nude mastitarsala (39).

Leg measurements: I 214 (209, 192-226), II 205 (190, 174-205), III 236 (225, 211-239), total 655 (625, 577-655).

Remarks. — The cheliceral blade has a prominent knob characteristic of the four Korean species described by Ah (1964), but not conspicuous among the American *Crypticula*.

The geographic proximity of *M. welbourni* to *M. diabola* (type localities less than 3 miles apart), may indicate an ecological relationship similar to the two sympatric species *Microtrombicula nasalis* and *M. wrenni* Loomis, recovered from the same individuals of several cricetid rodent species in Joshua Tree National Monument, California (Loomis, 1963).

This new species is named after Mr. W. C. Welbourn, Jr. of California State College, Long Beach in recognition of his numerous contributions to the studies of trombiculid mites.

Specimens examined (17). — Type series (12) plus 5 larval skins (WCW700728-15).

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